

AMENDMENTS TO CLAIMS

Claims 1, 10 and 20 are amended. All pending claims are reproduced below. This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. (Currently amended) A method for generating a highly condensed visual summary of video regions, comprising:

determining a dominant group in each of a plurality of video segments;

determining a key frame in each of the video segments;

defining a germ associated with each dominant group in each of the video segments;

laying out the germs on a canvas, each germ associated with a support; and

filling in the space of the canvas between the germs.

2. (Previously presented). The method of claim 1 wherein determining a dominant group includes:

determining a group within each of the plurality of video segments having the largest 3-D volume.

3. (Original) The method of claim 1 wherein defining a germ includes:

defining a two dimensional shape that encompasses the projection of the dominant group onto the key frame.

4. (Original) The method of claim 3 wherein the two dimensional shape is a rectangle.
5. (Original) The method of claim 3 wherein laying out the germs includes: determining a scale factor to be applied to every germ such that the germs are scaled to the maximum size that fits into the canvas.
6. (Original) The method of claim 3 wherein laying out the germs includes: placing the germs in rows, wherein each row has a height according to the longest germ in the particular row.
7. (Original) The method of claim 1 wherein filling in the space of the canvas includes: assigning a pixel value of each point in the canvas to the same pixel value in the support associated with the germ closest to each point.
8. (Original) The method of claim 7 wherein if the germ closest to the point does not have a support that includes the point, the point is assigned the pixel value of the closest germ with a support that includes the point.
9. (Original) The method of claim 7 wherein the point is assigned a background value if no support includes the point.

10. (Currently amended) A method for generating a highly condensed visual summary of video regions, comprising:

determining a germ in each of a plurality of images, the germ containing a region of interest;

laying out the germs on a canvas, each germ associated with a support; and

filling in the space of the canvas between the germs with one or more parts of the image from the support.

11. (Previously presented) The method of claim 10 wherein determining a germ includes:

detecting a face in each of the plurality of images.

12. (Previously presented) The method of claim 10 wherein determining a germ includes:

receiving user input, the user input associated with a part of an image.

13. (Previously presented) The method of claim 10 wherein determining a germ includes:

using an algorithm to determine the regions of interest of an image based on one or more methods selected from the group consisting of a general image analysis algorithm, a face-detection algorithm, an object detection algorithms and user input.

14. (Previously presented) The method of claim 10 wherein laying out the germs includes:

determining a scale factor to be applied to every germ such that the germs are scaled to the maximum size that fits into the canvas.

15. (Previously presented) The method of claim 10 wherein laying out the germs includes:

placing the germs in rows, wherein each row has a height according to the longest germ in the particular row.

16. (Previously presented) The method of claim 10 wherein filling in the space of the canvas includes:

assigning a pixel value of each point in the canvas to the same pixel value in the support associated with the germ closest to each point.

17. (Previously presented) The method of claim 16 wherein if the germ closest to the point does not have a support that includes the point, the point is assigned the pixel value of the closest germ with a support that includes the point.

18. (Previously presented) The method of claim 16 wherein the point is assigned a background value if no support includes the point.

19. (Previously presented) The method of claim 1 wherein defining a germ includes:

detecting a face in each of the plurality of images.

20. (Currently amended) The method of claim 1 wherein defining a germ includes:
using an algorithm to determine a salient part region of interest of an image.

21. (Previously presented) The method of claim 1 wherein filling the space of the canvas includes:
using a Voronoi algorithm to determine the shape of the support to be placed on the canvas.